

## REMARKS

The Examiner is thanked for the indication that claims 3, 4, 11, and 12 are allowable if rewritten in independent form.

Claims 1-16 remain pending in the instant application. Claims 1, 2, 5-10, and 13-16 presently stand rejected. Claims 1, 9, 11, and 13 are amended herein. Entry of this amendment and reconsideration of the pending claims are respectfully requested.

### *Specification*

The Examiner objected to the title of the invention stating, “[t]he title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. Accordingly, Applicants have amended the title to recite, “A NEXT AVAILABLE BUFFER ALLOCATION CIRCUIT.”

### *Claim Objection*

The Examiner objected to claim 11 as inadvertently dependent from the independent base claim. Accordingly, Applicants have amended claim 11 to depend from independent claim 9.

### *Claim Rejections – 35 U.S.C. § 102*

Claims 1, 2, 6-9, and 13-16 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,510,581 to Cohen.

A claim is anticipated only if each and every element of the claim is found in a single reference. M.P.E.P. § 2131 (citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628 (Fed. Cir. 1987)). “The identical invention must be shown in as complete detail as is contained in the claim.” M.P.E.P. § 2131 (citing *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226 (Fed. Cir. 1989)).

Amended independent claims 1 and 9 now recite, in pertinent parts, “a second input for receiving data corresponding to a currently selected buffer from among the array of buffers, **the second input not for receiving the data from one of the array of computational cells....**” Applicants respectfully submit that Cohen fails to disclose the aforementioned elements of claim 1 and 9.

In fact, FIG. 5 of Cohen illustrates flip-flops 70 receiving a signal from a buffer available line 32 from an adjacent selection circuit 12. Buffer available line 32 is the element that the Examiner indicated as corresponding to Applicants' claimed second input. *Office Action* mailed September 24, 2003, page 3, section 5. Therefore, Cohen discloses a buffer available line 32, which is an input received from one of the selection circuits 12. The Examiner indicated that "the selection circuit 12 and block 70 are looked at as a single cell as described by the claims." *Office Action* mailed September 24, 2003, page 2, section 5. Therefore, Cohen not only fails to disclose a second input not for receiving data from one of the array of computational cells, but is in direct opposition to amended independent claims 1 and 9.

Consequently, Cohen fails to anticipate each and every element of amended claims 1 and 9, as required under M.P.E.P. § 2131. Accordingly, Applicants request that the instant §102 rejection of claims 1 and 9 be withdrawn.

Amended independent claim 13 now recites, in pertinent part, "determining an **availability vector** corresponding to an **availability status of each buffer** in an array of buffers ...." Applicants respectfully submit that Cohen fails to disclose determining an availability **vector** corresponding to an availability status of **each buffer**.

In fact, Cohen discloses

In general operation, (and referring to FIG. 4) a clear **pulse** is provided for example by a host computer, both at the beginning of a turn-on initialization procedure and whenever the buffer memory associated with a particular selection circuit is read. The clear **pulse, indicating that the buffer** is thus available, causes a signal level on the buffer available line 32 to rise (to a logical "1") at a time when, in the illustrated embodiment, the clear **pulse** line turns "true" (a logical "1").

*Cohen*, col. 3, lines 41-50 (emphasis added). Thus, Cohen discloses generating a single clear pulse to indicate that a **single buffer** is available, but fails to disclose determining an entire availability vector corresponding to the availability status of each buffer in an array of buffers. Rather, Cohen discloses indicating that one buffer is available at a time. In contrast, amended claim 13 recites "determining an availability vector" which indicates the availability status of multiple buffers at once.

As illustrated in FIG. 4 of the instant application, multiple buffers may be available (e.g., B[2] through B[7]) at a given time and are determined to be available, but

only one of the available buffers is determined to be a **next** available buffer as a function of the **availability vector** and the **current selected entry vector**. However, Cohen fails to disclose determining the availability of multiple buffers at once. Rather, Cohen discloses determining the availability of one buffer at a time, whether or not other buffers are available.

Consequently, Cohen fails to anticipate each and every element of amended claims 13, as required under M.P.E.P. § 2131. Accordingly, Applicants request that the instant §102 rejection of claim 13 be withdrawn.

#### *Claim Rejections – 35 U.S.C. § 103*

Claims 5 and 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cohen in view of U.S. Patent No. 6,219,773 to Garibay, Jr. et al. (“Garibay”).

“To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. All words in a claim must be considered in judging the patentability of that claim against the prior art.” M.P.E.P. § 2143.03.

Dependent claims 5 and 10 are patentable over the prior art of record for at least the same reasons as discussed above in connection with their respective independent claims, in addition to adding further limitations of their own. Accordingly, Applicants respectfully request that the instant § 103 and 102 rejections of claims 5 and 10 be withdrawn.

#### **CONCLUSION**

In view of the foregoing amendments and remarks, Applicants believe the applicable rejections have been overcome and all claims remaining in the application are presently in condition for allowance. Accordingly, favorable consideration and a Notice of Allowance are earnestly solicited. The Examiner is invited to telephone the undersigned representative if the Examiner believes that an interview might be useful for any reason.